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JUL 05 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ofir Shalvi et al.
Serial No.: 09/493,526
Filed: 1/28/2000
Art Unit: 2631
Examiner: J. Corrielus
Docket No.: TI-30149
Conf. No.: 2369
Customer No.: 23494

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FACSIMILE COVER SHEET

<input checked="" type="checkbox"/> FACSIMILE COVER SHEET (1 SHEET)		<input type="checkbox"/> AMENDMENT	
<input type="checkbox"/> NEW APPLICATION		<input type="checkbox"/> EOT	
<input type="checkbox"/> DECLARATION		<input type="checkbox"/> NOTICE OF APPEAL	
<input type="checkbox"/> ASSIGNMENT		<input checked="" type="checkbox"/> APPEAL <u>SUPPL BRIEF (4 Pages)</u>	
<input type="checkbox"/> FORMAL DRAWINGS		<input type="checkbox"/> ISSUE FEE	
<input type="checkbox"/> INFORMAL DRAWINGS		<input type="checkbox"/> REPLY BRIEF (IN TRIPLICATE)	
<input type="checkbox"/> CONTINUATION APP'N		<input checked="" type="checkbox"/> Request to Reinstate Appeal	
<input type="checkbox"/> DIVISIONAL APP'N			
NAME OF INVENTOR(S): Ofir Shalvi et al.		RECEIPT DATE & SERIAL NO.: Serial No.: 09/493,526	
TITLE OF INVENTION: Method for Combating Ingress and Impulse Noise Using Coded Modulation		Filing Date: 1/28/2000	
TI FILE NO.: TI-30149	DEPOSIT ACCT. NO.: 20-0668	Conf. No.: 2369	
FAXED: 07/05/2005			
DUE: 07/05/2005			
ATTY/SECY: CHH/gs			

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Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, TX 75265

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JUL 05 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl.No.: 09/493,526
Applicant: Shalvi et al
Filed: January 28, 2000
TC/AU: 2631
Examiner: Corrielus

Confirmation No.: 2369

Docket: TI-30149
Cust.No.: 23494

REQUEST TO REINSTATE APPEAL


Commissioner for Patents
P.O.Box 1450
Alexandria VA 22313-1450

Sir:

Pursuant to Rule 193(b)(2)(ii) applicants request reinstatement of the appeal in this application; a supplemental appeal brief is enclosed.

The original notice of appeal was filed 11/08/2004 and the original appeal brief was filed 01/26/2005. Prosecution was reopened with the final rejection mailed 04/05/2005. The Commissioner is hereby authorized to charge any necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668

Respectfully submitted,



Carlton H. Hoel
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Texas Instruments Incorporated
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JUL 05 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appl.No.: 09/493,526
Appellant: Shalvi et al
Filed: January 28, 2000
TC/AU: 2631
Examiner: Corrielus

Confirmation No.: 2369

Docket: TI-30149
Cust.No.: 23494

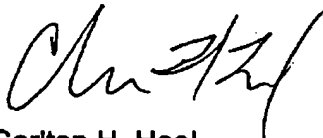
APPELLANTS' SUPPLEMENTAL BRIEF

Commissioner for Patents
P.O.Box 1450
Alexandria VA 22313-1450

Sir:

The attached sheets contain the Rule 41.37 items of appellants' supplemental brief. The fee for filing a brief in support of the appeal has already been paid. The Commissioner is hereby authorized to charge any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted,



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Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Claims 1-3 and 5 are pending in the application with claim 5 allowed and claims 1-3 finally rejected. This appeal involves the finally rejected claims.

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The invention provides a method of coding for upstream transmission in a digital cable system. Application page 4, lines 4-21 describes the coding. And application page 5, line 22 to page 6, line 21 plus Fig.3 illustrate a bit-wise scoring for soft (Viterbi-type) decoding.

Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal

The grounds of rejection to be reviewed on appeal are:

(1) claims 1-3 were rejected as anticipated by the Vijayan reference.

Rule 41.37(c)(1)(vii) Arguments

(1) Claims 1-3 were rejected as anticipated by Vijayan; the Examiner pointed to Vijayan Figs.2-3.

Appellants reply that claims 1-3 are limited to coding for upstream transmission in a cable system. In contrast, Vijayan applies to a wireless (air interface) system; see Vijayan column 4, lines 5-21. Because the problems that coding are to overcome for an upstream in a cable system differ from the problems of wireless systems, Vijayan does not anticipate claims 1-3. In

particular, the coding in Vijayan is to counter multipath fading problems of wireless systems; whereas, a cable system has no fading problems but rather impulse and burst noise problems; see Vijayan, column 2, lines 36-41 and the bottom two paragraphs of application page 1.

Rule 41.37(c)(1)(viii) Claims appendix

1. An encoder for a CATV upstream data channel transmitter, comprising:
 - a convolutional encoder for receiving data values, said convolutional encoder concatenated with an outer Reed-Solomon encoder;
 - a bit interleaver interconnected with said convolutional encoder; and
 - a symbol mapper interconnected with said bit-interleaver.
2. The encoder of claim 1, wherein said symbol mapper is a QAM mapper.
3. A system which comprises:
 - an encoder for a CATV upstream data channel transmitter, comprising:
 - a convolutional encoder for receiving data values, said convolutional encoder concatenated with an outer Reed-Solomon encoder;
 - a bit interleaver interconnected with said convolutional encoder; and
 - a symbol mapper interconnected with said bit interleaver; and
 - a bit-interleaved decoder for a CATV upstream channel receiver, comprising:
 - a scorer for receiving symbols;
 - a bit de-interleaver interconnected with said scorer; and
 - a convolutional decoder interconnected with said bit de-interleaver.

Rule 41.37(c)(1)(ix) Evidence appendix

N/A

Rule 41.37(c)(1)(x) Related proceedings appendix

N/A